



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/689,887	10/13/2000	Harald Kleine-Altekamp	Q60642	8029
7590	05/21/2004		EXAMINER	
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC 2100 PENNSYLVANIA AVENUE, N.W. Washington, DC 20037-3213			WONG, BLANCHE	
			ART UNIT	PAPER NUMBER
			2667	7

DATE MAILED: 05/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/689,887	KLEINE-ALTEKAMP ET AL.
<b>Examiner</b>	<b>Art Unit</b>	
Blanche Wong	2667	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on October 13, 2000.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-6 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-3,5 and 6 is/are rejected.

7)  Claim(s) 4 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All   b)  Some \* c)  None of:

1.  Certified copies of the priority documents have been received.

2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_.

3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date #4, Oct 13,2000.

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_ .

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement filed October 13, 2000, fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

### ***Drawings***

2. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. Preliminary amendment suggested edition on pg. 3, ln. 3-5 and after ln. 5. Amendment has not been made nor considered because location of text cannot be pinpointed.

4. The disclosure is objected to because of the following informalities: Reference to claim 1 on p.2, six lines from the bottom of the page, of the Specification, should be deleted.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 1 and 6 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Hurtta et al. (U.S. Pat No. 6,226,261).**

With regard to claim 1, Hurtta discloses a network element (Fig. 1) for a digital communications network, comprising

- a number of interface modules (INA1 – n, OUTA1 – n, INB1 – n, OUTB1 – n),
- a first, active switching matrix (SWF\_A), connected to the interface modules (INA1 – n, OUTA1 – n), for switching paths between the interface modules (it is inherent in a switching network),
- a second, redundant switching matrix (SWF\_B), also connected to the interface modules (INB1 – n, OUTB1 – n), and

- a controller (CU; see also Fig. 5-7 and col. 7, ln. 1-2) for detecting a fault condition (col. 6, ln. 36) of the active switching matrix and for switching to the redundant switching matrix (col. 6, ln. 58-61), which is then used as a new active switching matrix,

characterized in

that the interface modules (INA1 – n, OUTA1 – n, INB1 – n, OUTB1 – n) are divided into two groups (INA1 – n and OUTA1 – n, INB1 – n and OUTB1 – n), and that each of the two switching matrices (SWF\_A, SWF\_B) is combined with a respective one of the groups of interface modules (SWF\_A combines with INA1 – n and OUTA1 – n, SWF\_B combines with INB1 – n and OUTB1 – n) to form two separate units (A,B), which are interconnected by internal links (arrow between CU\_A and CU\_B), whereby the units (A,B) can be installed in two separate rooms (it is obvious that if there are two groups, then the two groups can be installed separately).

With regard to claim 6, Hurtta discloses a network element as claimed in claim 1 which comprises a second, redundant controller (CU\_B; see also col. 6, ln. 52-64), wherein a respective one of the controllers (CU\_A, CU\_B) is spatially associated with a respective one of the units (A,B), and wherein one of the controllers (CU\_A, CU\_B) at a time operates as an active controller (active switching network, col. 6, ln. 52-64) while

the other is available as a standby unit (passive switching network, col. 6, ln. 52-64) in the event of a failure.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hurtta et al. (U.S. Pat No. 6,226,261) in view of Sakamoto et al. (U.S. Pat No. 5,903,544).

With regard to claim 2, Hurtta discloses a network element as claimed in claim 1. However, Hurtta fails to explicitly show a respective one of the switching matrices and a respective one of the groups of interface modules are installed as a unit in a rack, as recited in claim 2.

In an analogous art, Sakamoto discloses a respective one of the switching matrices and a respective one of the groups of interface modules are installed as a unit (1) in a rack, as recited in claim 2.

A person of ordinary skill in the art would have been motivated to employ Sakamoto in Hurtta in order to obtain the unity of a switch and interface. The suggestion/motivation to do so would have been to reduce the size of a handle to meet the various network configuration requirements in versatile fashion. Sakamoto, col. 2, ln. 45-46. At the time the invention was made, therefore, it would have been obvious to

one of ordinary skill in the art to which the invention pertains to combine Read and Hurtta to obtain the invention as specified in claim 2.

9. **Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hurtta et al. (U.S. Pat No. 6,226,261) in view of Read et al. (5,781,527).**

With regard to claim 5, Hurtta discloses a network element as claimed in claim 1. However, Hurtta fails to explicitly show two units with its own clock supply with one of the clock supplies at a time operating as an active clock supply and the other being available as a standby unit in the event of a failure, as recited in claim 5.

In an analogous art, Read discloses two units (broadband 14, wideband 16, narrowband 18 subsystems) with its own clock supply (col. 4, ln. 2-4) with one of the clock supplies at a time operating as an active clock supply and the other being available as a standby unit in the event of a failure, as recited in claim 5.

A person of ordinary skill in the art would have been motivated to employ Read in Hurtta in order to obtain separate and independent clocking. The suggestion/motivation to do so would have been to provide a digital cross-connect system that integrates narrowband, wideband and broadband subsystems to route and manipulate circuit as well as cell-based traffic. Read, col. 2, ln. 14-22. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Read and Hurtta to obtain the invention as specified in claim 5.

With regard to claim 3-4, Read also discloses optical interface modules designed for the connection of optical fibers (col. 2, ln. 35-37) of a fiber-optic communications system, as recited in claim 3; and optical links, as recited in claim 4.

With regard to claim 4, whether the limitations "short-range" and "about 200 meters" are not considered by the Examiner because consequential or potential difference(s) with or without these limitations has not been identified in the claim or disclosure.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Busschbach et al. (U.S. Pat No. 6,202,170) discloses an equipment protection system where a hot standby is used. Fig. 2; see also Col. 1, ln. 60-61.

Chagenty et al. (U.S. Pat No. 6,285,656) discloses an active-passive flow switch failover technology in which a Y-cable is used to allow both flow switches to remain simultaneously connected to the network devices. Fig. 1.

Fourie et al. (U.S. Pat No. 6,724,756 B2) discloses a method for sharing a call record between a first controller and a second controller. Col. 2, ln. 62-66; col.3, ln. 17-21.

Helles et al. (U.S. Pat No. 6,639,895) discloses a fault tolerant network switch that includes two or more switches units and a highly reliable interconnect unit so that

during normal operation, both switches are actively handling network packets. Col. 2, ln. 1-3. A fault detector for monitoring the operation of the switch unit and, upon a fault, immediately communicating this status information to the fault detector of another switch unit. Col. 2, ln. 42-46.

Ramaswami et al. (U.S. Pat No. 6,650,803) disclose optical cross-connections.

Fig. 3 and 6.

Smith et al. (U.S. Pat No. 6,359,858) discloses a switching redundancy control in which a bridge provides identical traffic to the working and redundant tributary cards.

Fig. 2.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 703-305-8963. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H Pham can be reached on 703-305-4378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BW

BW  
May 12, 2004

  
CHAU NGUYEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600